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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/751,566	01/05/2004	Pete M. Morgan	MPM / 03	5765

7590 07/20/2005
Mr. Pete Morgan
1500 Clovermoll Drive
Cincinnati, OH 45231

EXAMINER

MICHENER, JOSHUA J

ART UNIT PAPER NUMBER

3644

DATE MAILED: 07/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/751,566

Applicant(s)

MORGAN ET AL.

Examiner

Joshua J. Michener

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 07/08/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-30 and 32-44 is/are rejected.
- 7) ☒ Claim(s) 11 and 31 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Objections

1. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 11-37 have been renumbered 10-36. Claim 10 is missing.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-10, 12, and 32-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan (US 4,785,576) in view of Dillon (US 6,490,825).

3. For claims 1,10,21, 30, Morgan, figure 7 discloses most of the claimed invention except for indicating that the horizontal flanges are adjustable. Dillon teaches of pivotal horizontal members. Thus, it would have been obvious to provide the flanges with an adjustable feature for purposes of changing the support structure's shape at will to provide a greater aesthetic appeal. Further, hinges are a readily known art and can be adapted to many areas where different angular requirements are sought. Thus, it would be obvious for one having ordinary skill in the art at the time the invention was made to

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provide the angular adjustable flange (40) of Morgan, as modified, in the form of a hinge.

4. For claims 2,3, 22, and 23, figure 1 clearly shows vertical upright members at approximately 90 degrees thus making them angled no less than 45 degrees with the surface.

5. For claims 4 and 24, Morgan, as modified, figure 1 discloses a plurality of holes in the upright members that are vertically spaced.

6. For claims 5 and 25, Morgan (column 3, line 35), discloses the use of wood, plastic, or metal.

7. For claims 6 and 26, Morgan fails to teach the upright members being square in cross-section. However, it would have been an obvious design choice to use a square cross-section since the applicant has not discussed that a square cross-section is for any particular purpose or solve a stated problem and it appears that the invention would perform equally well with the rectangular cross-section taught by Morgan.

8. For claims 7 and 28, Morgan, figure 1 discloses a bottom portion of upright members that are pointed (11).

9. For claims 8 and 28, Morgan, figure 7 discloses a flange comprising of a hole (40) for purposes of coupling with the upright member (11).

10. For claims 9 and 29, Morgan, figures 7 and 8 disclose a plant support structure comprised of triangle of equal length horizontal support members. Thus, from knowledge of simple geometry it is concluded that given the instance that the flanges (40) were modified as stated in line 3 above, the angles would also be equal. Further,

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in a broader spectrum, it is common knowledge that when constructing normal polygons such as triangles, squares, pentagons, hexagons, octagons, etc. all their internal angles will be equal. Thus, the flange angles created will be equal.

11. For claims 12 and 32, Morgan, figure 7 discloses one or more support members substantially horizontal with respect to the surface.

12. For claims 15 and 16, Morgan, figure 5 clearly shows a plurality of plant supports comprising of a matrix arranged in abutting relation.

13. For claims 14 and 34, Morgan discloses a triangle.

14. For claims 17,18,19, and 35, Morgan, as modified, discloses a plurality of plant supports, but fails to teach of two different shapes interconnected. Dillon (Figure 2) teaches of a flexible trellis, which can be pivoted to any arrangement that is desired. It would be obvious to one of ordinary skill in the art at the time the invention was made to modify the plant support of Morgan to adapt to any polygonal unitary plant support matrices of various shapes given Dillon. One may seek various arrangements for either supporting numerous plants in a shaped orientation or simply for the aesthetic appeal.

15. Claims 13 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan in view of Dillon as applied to claims 1 and 21 above and further in view of Gove (US 6,889,982). Morgan, as modified, discloses the plant support structure of claim 1, but does not include the use of metal tubing for a plurality of horizontal legs. Gove (column 15, line 16) discloses the use of metal tubing in horizontal cross members for support. It would be obvious for one of ordinary skill in the art at the time the invention was made to modify the horizontal legs of Morgan to that of metal tubing.

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Metal tubing would provide increased sturdiness and strength while reducing the mass of the support structure. Further, the use of metal tubing may provide a greater lifetime of the support structure for certain types of metal alloys such as aluminum or stainless steel are resilient to the elements.

16. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan in view of Dillon as applied to claim 1 above, and further in view of Ragan (US 1,025,073). Morgan, as modified, fails to disclose a plant support with members angled with respect to the surface to define a plant support that is decreasing in area in an upward vertical direction, and wherein said plurality of upright members do not directly contact each other so to define an open plant support area at a top end of said plant support. Ragan teaches of such a structure. Thus, it would be obvious for one of ordinary skill in the art at the time the invention was made to further modify Morgan according to Ragan. Having a conical or pyramidal shaped support structure would be beneficial to various plants that to grow in such a fashion such as a pine tree. Such plants would then have the required support in the correct areas further allowing for horizontal expansion as well as vertical growth.

17. Claims 36–43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan in view of Dillon and further in view of Sedlacek (US 2004/0244286 A1).

Morgan, figure 7 discloses most of the claimed invention except for indicating that the horizontal flanges are adjustable. Dillon teaches of pivotal horizontal members.

Thus, it would have been obvious to provide the flanges with an adjustable feature for purposes of changing the support structure's shape at will to provide a greater aesthetic

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appeal. Hinges are a readily known art and can be adapted to many areas where different angular requirements are sought. Thus, it would be obvious for one having ordinary skill in the art at the time the invention was made to provide the angular adjustable flange (40) of Morgan, as modified, in the form of a hinge. Further, Morgan as modified, does not disclose a kit. Sedlacek teaches of such a kit. It would be obvious for one of ordinary skill in the art at the time the invention was made to modify Morgan in view of Dillon to a plant support kit. Having a plant support kit stored in a box ready for construction would save on space during shipping also on cost during assembly and storage stages of the plant support.

18. Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan in view of Dillon, further in view of Gove and further in view of Sedlacek. Morgan, as modified, does not include the use of metal tubing for a plurality of horizontal legs.

Gove (column 15, line 16) discloses the use of metal tubing in horizontal cross members for support. It would be obvious for one of ordinary skill in the art at the time the invention was made to modify the horizontal legs of Morgan to that of metal tubing. Metal tubing would provide increased sturdiness and strength while reducing the mass of the support structure. Further, the use of metal tubing may provide a greater lifetime of the support structure for certain types of metal alloys such as aluminum or stainless steel are resilient to the elements.

Allowable Subject Matter

19. Claims 11 and 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua J. Michener whose telephone number is (571) 272-1467. The examiner can normally be reached on Monday through Friday 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Teri Luu can be reached on (571) 272-7045. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Joshua J Michener
Examiner
Art Unit 3644

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